

Implications of Industry 4.0 to Supply Chain Management and Human Resources Management: The State of the Art

Authors : Ayse Begum Kilic, Sevgi Ozkan

Abstract : Industry 4.0 (I4.0) is a significant and promising research topic that is expected to gain more importance due to its effects on important concepts like cost, resource management, and accessibility. Instead of focusing those effects in only one area, combining different departments, and see the big picture helps to make more realistic predictions about the future. The aim of this paper is to identify the implications of Industry 4.0 for both supply chain management and human resources management by finding out the topics that take place at the intersection of them. Another objective is helping the readers to realize the expected changes in these two areas due to I4.0 in order to take the necessary steps in advance and make recommendations to catch up the latest trends. The expected changes are concluded from the industry reports and related journal papers in the literature. As found in the literature, this study is the first to combine the Industry 4.0, supply chain management and human resources management and urges to lead future works by finding out the intersections of those three areas. Benefits of I4.0 and the amount, research areas and the publication years of papers on I4.0 in the academic journals are mentioned in this paper. One of the main findings of this research is that a change in the labor force qualifications is expected with the advancements in the technology. There will be a need for higher level of skills from the workers. This will directly affect the human resources management in a way of recruiting and managing those people. Another main finding is, as it is explained with an example in the article, the advancements in the technology will change the place of production. For instance, 'dark factories', a popular topic of I4.0, will enable manufacturers to produce in places that close to their marketplace. The supply chains are expected to be influenced by that change.

Keywords : human resources management, industry 4.0, logistics, supply chain management

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